

Title (en)  
Pneumatic tire

Title (de)  
Luftreifen

Title (fr)  
Pneu

Publication  
**EP 2080643 A1 20090722 (DE)**

Application  
**EP 08021742 A 20081215**

Priority  
JP 2008005568 A 20080115

Abstract (en)

Provided is a pneumatic tire in which improvement is achieved in a wet performance and reduction in vehicle exterior noise while ensuring a dry performance. The pneumatic tire has a designated fitting direction relative to a vehicle, in which four main grooves (2a-2d) extending in a circumferential direction of the tire are provided on a tread portion (1), two grooves out of these main grooves are located on each of both sides of a tire equator, five lines of land portions (10,20,30,40,50) are defined by the main grooves (2a-2d) a center land portion (10) located on the tire equator is a rib which continuously extends in the circumferential direction of the tire without being sectioned, a plurality of arcuate grooves (21,31) each extending in an arc shape are provided on each of a pair of second land sections (20,30) located respectively on both sides of the center land section, an end of each of the arcuate grooves (21,31) is connected to the main groove on an inner side of the vehicle, another end of the arcuate groove (21,31) is connected to the adjacent arcuate groove, a repeat pitch  $P_o$  of the arcuate grooves (31) on the second land portion (30) located on an outer side of the vehicle is set greater than a repeat pitch  $P_i$  of the arcuate grooves (21) on the second land portion (20) located on the inner side of the vehicle, and a proportion  $P_o/P_i$  of the pitches is set in a range from 1.5 to 3.0.

The tire has multiple circular arc grooves (21, 31) extending in the shape of a circular arc provided in a pair of convex parts (20, 30) located in both sides of a center convex part (10). An end of each circular arc groove is connected to a main groove of inner side of a vehicle. A repetition pitch of a circular arc groove (31) formed in the convex part (30) of outer side of the vehicle is larger than a repetition pitch of the circular arc groove (21) in the convex part (20) of inner side of the vehicle.

IPC 8 full level  
**B60C 11/03** (2006.01)

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Citation (applicant)

- JP H07164829 A 19950627 - YOKOHAMA RUBBER CO LTD
- JP 2007015655 A 20070125 - YOKOHAMA RUBBER CO LTD

Citation (search report)

- [A] JP H07290909 A 19951107 - BRIDGESTONE CORP
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- [A] EP 1437237 A2 20040714 - SUMITOMO RUBBER IND [JP]
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- [A] EP 1106391 A2 20010613 - SUMITOMO RUBBER IND [JP]
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- [A] JP 2005053311 A 20050303 - BRIDGESTONE CORP

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